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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/673,651	11/02/2000	Pierre Bernas	198944US	1241	
22850	22850 7590 08/09/2004		EXAMINER		
-	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			DUONG, DUC T	
	IA, VA 22314			PAPER NUMBER	
			2663	7	
<u></u>			DATE MAIL ED: 08/09/2004	. /	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
		Applicant(s)				
Office Action Summary	09/673,651	BERNAS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Duc T. Duong	2663				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If NO period for reply sistent above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>04 May 2004</u> .						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-23</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) 11-14 is/are allowed.						
6)⊠ Claim(s) <u>1-10 and 15-23</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119	•					
12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☒ All b) ☐ Some * c) ☐ None of:  1. ☒ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		formal Patent Application (PTO-152)				

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#### **DETAILED ACTION**

### Response to Amendment

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 23 recite the limitation "a group" in lines 5 and 4, respectively.

There is insufficient antecedent basis for this limitation in the claim since "a group" on those lines referred to the same "group" on line 3. Thus, it should change to "the group".

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-6, 8, 15-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheu (U.S. Patent 5,781,715) in view of Jolissaint et al (U.S. Patent 5,276,440).

Regarding to claim 1, Sheu discloses a network for distributing information between a central unit 20 and stations 32-34 (Fig. 2 col. 2 lines 57-65), comprising

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information splitting devices 22-28 with inputs/outputs P/S connected on the one hand to the central unit and on the other hand to the stations (Fig. 2 col. 2 lines 66-67 and col. 3 lines 1-4), an interface device in each station (implicitly shown), wherein the interface device of each station is linked to a first splitting device and to a second splitting device (Fig. 2 col. 3 lines 25-36) and wherein protocol exchanges between the central unit and the interface device are organized such that the central unit can determine the splitting device is faulty (col. 4 lines 5-12).

Sheu fails to teach the protocol exchanges between the central unit and the interface device are organized such that the central unit can determine whether the terminal is faulty or an interface is faulty.

However, Jolissaint discloses a communication network wherein error report information (protocol) exchanges between a network manager 30 (central unit) and the nodes 12-26 (devices) to determine whether the nodes is faulty or a link is faulty (interface faulty as suggested by Applicant's specification on page 7 lines 17-20), see Fig. 1 col. 6 lines 25-35.

Thus, it would have been obvious to a person of ordinary skill in the art to employ exchanges of report information as taught by Jolissaint in Sheu's system to determine location of network failure. The motivation to do so would have been to control function of the network and keep track of resource usage.

Regarding to claims 2 and 15, Sheu discloses all the limitation with respect to claim 1 including the plural interface devices are mounted in cascade on a link starting

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from the splitting device (Fig. 2; shown interface devices of station 1 and 2 are cascaded).

Regarding to claims 3 and 16, Sheu discloses a means for detecting a fault relating to a problem on a link between this interface device and the first or the second splitting device (col. 5 lines 14-23).

Sheu fails to teach the means is arrange in the interface device of the station.

However, to arrange such means in the interface device of the station would have been obvious to one of skilled in the art to lessen the load of functions being by the central unit.

Regarding to claims 4 and 17, Sheu discloses the means for detecting faults comprises means for mutual acknowledgement with the central unit (Fig. 4 col. 4 lines 36-55).

Regarding to claims 5 and 18, Sheu discloses a device for switching over from the first splitting device to the second splitting device (col. 3 lines 52-60).

Regarding to claims 6 and 19, Sheu discloses the switching device is in the central unit (col. 3 lines 61-67 and col. 4 lines 1-4).

Regarding to claims 8 and 21, Sheu discloses a splitting device is linked by a link to one of its inputs/outputs to a single special interface 44, this special interface device being linked by another link connected to another input/output of another splitting device (Fig. 3 col. 4 lines 25-29).

5. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheu in view of Gagliardi et al (U.S. Patent 5,442,630).

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Regarding to claims 7 and 20, Sheu discloses all the limitation with respect to claims 1 and 15, except a link between a splitting device and an interface device is effected with a cable having two twisted conductors. However, Gagliardi discloses a system using various interconnected transmission medium such as coaxial cable, twisted wire pairs, etc (col. 1 lines 42-45). Thus, it would have been obvious to one of skilled in the art to include the various interconnected transmission medium as taught by Gagliardi in Sheu's system for different rate of data transfer required.

6. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheu in view of Adams (U.S. Patent 5,142,532).

Regarding to claims 9 and 22, Sheu discloses all the limitation with respect to claims 1 and 15, except for the splitting device capable of supporting a bit rate greater than a nominal bit rate. However, Adams discloses a broadband communication system with splitter operating at bit greater then nominal bit rate (Fig. 1 col. 2 lines 12-29). Thus, it would have been obvious to a person of ordinary skill in the art to employ a splitting device as taught by Adams in Sheu's system for operating at a greater than a nominal bit rate. The motivation to do so would have been to provide higher capacities to be delivered to customers.

7. Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheu in view of Suzuki (U.S. Patent 4,884,263).

Regarding to claims 10 and 23, Shue discloses all the limitation with respect to claims 1 and 15, except for addresses used to identify elements of the network comprises fields of which a first field makes it possible to identify a group of stations

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connected so splitting device identified by a second field and that a modification of a value of the second field makes it possible to connect a group of stations to another splitting device. However, Suzuki discloses a packet switched communication network comprising source table storing source terminal addresses (field identifying group of stations) and source switching nodes (field identifying splitting device), wherein upon in the event of a failure in a transmission path the source table switch to free-trouble transmission path (switch to another splitting device), see Fig. 4 col. 4 lines 58-66.

Thus, it would have been obvious to a person of ordinary skill in the art to employ a source table as taught by Suzuki in Sheu's system for switching from a fault or failure transmission path to a free trouble transmission path. The motivation to do so would have been establish a transmission path through which message packets can be transmitted to its destination even if an abnormal condition occurs in the transmission path.

### Allowable Subject Matter

8. Claims 11-14 are allowed.

### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 703-605-5146. The examiner can normally be reached on M-Th (8:30 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DIDITENT EXAMINED